

DESCRIPTION OF A NEW GENUS AND SPECIES OF DISCOGLOSSOID TOAD FROM NORTH AMERICA.

By LEONHARD STEJNEGER,
Curator, Division of Reptiles and Batrachians.

The discovery of a discoglossoid genus of batrachia in America is almost as noteworthy an event among the *Salientia* as the appearance of the blind proteoid salamander, *Typhlomolge*, among the *Urodeles* a few years ago.

The salientian suborder Costata, embracing the single family *Discoglossidae*, to which the new genus belongs, has been credited with a most extraordinary geographic distribution. Until now it was composed of four genera, three of which are confined to the southwestern corner of the palaearctic region, except a single species at the southeastern end of the same region. The fourth genus, composed of a single species, represents, alone, the batrachia in New Zealand. None of the seven species known to form this suborder consequently had been found in the Western Hemisphere at all, and none has thus far been taken in tropical Africa, Australia, or Asia, with the above exception.

The addition of a typical costate genus to the fauna of North America is therefore not only an interesting novelty in itself, but it emphasizes the fact that we have as yet much to learn about the geographical distribution of the vertebrates even in regions which have been fairly well explored.

The suborder Costata, as the name implies, is trenchantly separated from all other tailless batrachians by the possession of ribs. Concomitant with this important character is the presence of transverse processes at the base of the urostyle.

ASCAPHUS,¹ new genus.

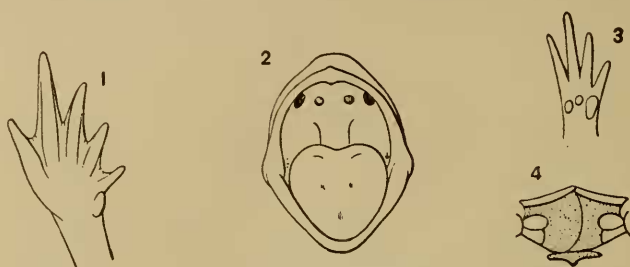
Tympanum and Eustachian tubes not visible (probably absent); pupil elliptical, vertical; diapophyses of sacral vertebra moderately dilated; tongue free behind; second rib with a posterior process; sternum a narrow transverse band of cartilage; urostyle articulated to a single condyle; vomerine teeth in two small groups between choanæ; parotoid gland well developed.

¹ From α , without; $\sigma\kappa\acute{\alpha}\phi\omicron\varsigma$, spade.

Type.—*Ascaphus truei* Stejneger.

Upper jaw toothed; shoulder girdle of the arciferous type; precoracoid but slightly curved; coracoid short; epicoracoid cartilage very broad; apparently no omosternum; sternum a narrow transverse cartilage with a short posterior median process; tongue thick, broadly pear-shaped, slightly emarginate and free behind, adherent in front; urostyle with two basal transverse processes directed obliquely backward, the articular surface quite flat; outer metatarsals separated by web; fingers free; toes slightly webbed; no subarticular tubercles; tips of digits obtusely pointed; inner metatarsal tubercle slight.

The type specimen being thus far unique, I have not ventured to dissect it further than to make clear the above features, and even a few of these are somewhat uncertain—for instance, the extent of the



ASCAPHUS TRUEI.

FIG. 1.—UNDERSIDE OF RIGHT HIND FOOT. FIG. 2.—OPEN MOUTH. FIG. 3.—UNDERSIDE OF RIGHT FORE FOOT. FIG. 4.—PECTORAL ARCH.

Enlarged $1\frac{1}{2}$ times.

degeneration of the auditory tract. The exact shape of the sternum is also a little doubtful, inasmuch as it had been considerably damaged by the collector cutting the abdomen open to admit alcohol to the intestines, but it seems almost certain that there are no posteriorly diverging lateral styles as in the other genera. The precise outline of the pupil is difficult to determine, but it appears to be vertically elliptical; what shape it might assume by greater contraction is quite uncertain.

If the shape of the sternum really is as it appears to be in the only specimen at hand, this genus differs considerably from the four known genera, but in most other respects *Ascaphus* agrees with one or more of them, the chief exception being the position of the vomerine teeth, which in all the others are behind the level of the choanæ, while in our new genus they are located entirely between them.

ASCAPHUS TRUEI,¹ new species.

Type.—No. 25979, U.S.N.M.; Humptulips, Washington; August 19, 1897; collector, Cloud Rutter.

¹Named in honor of Dr. F. W. True, head curator of the Department of Biology, U. S. National Museum.

Description of type specimen.—Vomerine teeth in two small groups between the choanae; tongue large, pear-shaped, thick, adherent in front, free in the posterior third; head flat, slightly broader than long; snout obtusely pointed, high, abruptly descending, with well-marked canthus rostralis, longer than diameter of orbit; nostril considerably nearer the orbit than the tip of the snout; eye moderate; interorbital space about as broad as upper eyelid, much less than distance between nostrils; no tympanum; fingers long, slender, obtusely pointed, free, first shortest, third longest, second and fourth equal; no subarticular tubercles; three convex palmar tubercles, the inner largest; hind limbs rather long, the tibio-tarsal articulation reaching the center of the eye; tibia longer than femur, the heels overlapping when legs are bent at right angles to body; toes rather slender, except outer, which is wide and flat; webs very short, barely reaching beyond the metatarsals, but edging the toes for some distance; no subarticular tubercles; a moderately sized inner metatarsal tubercle, somewhat longer than one-half the length of inner toe; no tarsal fold. Skin above granular, yet shiny, wrinkled, and irregularly warty on the lower back, and with similar pustules on the limbs; below smoother, wrinkled, and pustuled on the posterior aspect of the femurs near the vent; a well-marked elongate parotic gland extending from posterior angle of eye toward the shoulder; a large elongate gland on side of body. Color above, dull reddish brown, with a few indistinct blackish markings on the back; a dusky band across the middle of upper eyelids and interorbital space; the whole top of the head in front of this band pale reddish gray, which color at the end of the snout descends on the middle line to the lip as a narrow projection; on each side of this light streak the vertical portion of the tip of the snout is covered by a large black spot which extends backward as a narrow band through the nostrils and the eye and forming the lower border of the parotoid gland; below the insertion of the fore limb a blackish spot irregularly bordered by whitish; some irregular blackish and whitish spots on the posterior aspect of the arm; a blackish cross band, interrupted in the middle, at lower end of forearm; an ill-defined, dusky band, more or less irregularly edged with whitish along outer aspect of femur and tibia, and continued on under side of foot; posterior aspect of femur near vent dusky with whitish pimples; tips of digits whitish; under side whitish, more or less clouded with brownish, especially across the chest.

Dimensions.—Snout to vent, 40 mm.; width of head, 15 mm.; diameter of eye, 4 mm.; interorbital width, 3 mm.; eye to nostril, 3 mm.; eye to tip of snout, 6.5 mm.; fore limb, 25 mm.; hind limb, 59 mm.

Only a single specimen of this remarkable animal was collected by Mr. Cloud Rutter, at Humptulips, in the extreme western portion of the State of Washington, August 19, 1897. Mr. Rutter was at the time engaged in investigations for the U. S. Commission of Fish and Fisheries.